

CALIFORNIA SCHOOLS



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COVER

The picture on the cover shows an astronomy class at the San Bernardino Valley Junior College at work upon celestial globes, blank spheres upon which constellations are sketched and stars named, after nights of observing the seasonal succession of stellar groups.

Instructors in diverse subject matter fields at San Bernardino Valley Junior College attempt to develop the social intelligence of students by relating course work to their special and general needs. Astronomy, for example, is recommended for majors in English, social science, art, and commerce, so that these students may become familiar with modern concepts of stars and space, of light and atoms, and build a scientific world picture.

Will C. Wood

With the death of Will C. Wood at his Piedmont home on Monday, May 15, California lost one of its most valued citizens, and teachers and school administrators a friend and counselor. For more than thirty years—as a teacher in the public schools, president of a county board of education, as Commissioner of Secondary Education on the staff of the California State Department of Education, and finally for eight years as Superintendent of Public Instruction—he was identified with education.

Mr. Wood was born in Elmira, Solano County, where he attended the public schools. He was a student at Stanford University, the University of California, and University of Michigan. He received his master of arts degree from the University of Southern California.

At the age of 21, Mr. Wood was a school principal at Fairfield, and four years later was president of the Solano County Board of Education. He moved to Alameda County in 1906, becoming principal of the Wilson School in Alameda, and in 1909, was named City Superintendent of Schools of Alameda.

His exceptional ability as an educator became recognized throughout the state and he was named State Commissioner of Secondary Schools in 1914.

After five years in that position, he was elected to the office of State Superintendent of Public Instruction, in which he served two terms, retiring to accept an appointment as State Superintendent of Banks.

As Superintendent of Public Instruction, Mr. Wood ranks with John Swett for his influence on the schools of the state. His leadership was accepted to a remarkable extent by professional and nonprofessional groups alike. During his service as Commissioner of Secondary Education and later as Superintendent he initiated a state program for secondary education and established it as a universally accepted part of the public school system. Likewise as the result of his wisdom and foresight, there is now a constitutional provision for a fixed annual charge to support the public schools of the State, thus protecting them from political fortuities, and safeguarding in some measure the economic and professional security of the teachers.

By the men and women of his profession he will be remembered for his unremitting effort in their behalf and for his successful endeavor to place teaching on a professional level. By the people of the State he will be remembered as the Superintendent of Public Instruction who traveled in remote districts striving at once to help build better schools and to resist the efforts of the enemies of the public schools to reduce funds and curtail educational services.

Science Courses in California High Schools

FRANK B. LINDSAY, *Assistant Chief, Division of
Secondary Education*

Descriptions of courses in science in California public high schools show a confusion of purpose and method similar to the situation revealed by the National Survey of Secondary Education for the country as a whole. It may likewise be said of science instruction in California that there is "... lack of uniformity in organization, and criteria for the selection of the materials of instruction have not been formulated."¹ The very titles of courses suggest diversity of aim as well as the introduction of innovating practices into a field of learning traditionally dominated by biology, physics, and chemistry. San Bernardino High School and Whittier High School offer Everyday Science; Eureka and Fortuna have Consumer's Science; Campbell, Caruthers, Oroville, Petaluma, and Redondo high schools provide Applied Science; El Dorado County High School (Placerville) gives Popular Science; Pomona High School has Science Survey; and Kern County High School (Bakersfield) presents a course in World Science. The most encouraging feature about all such courses is the clear indication that dissatisfaction exists as to the service to youth of the formerly familiar textbook-recitation-laboratory-notebook courses, and that teachers and principals are endeavoring to meet in greater degree actual needs of adolescents.

Among the practices mentioned by the National Survey of Secondary Education as frequently appearing in science instruction were the organization of courses around major generalizations, the problem method of development, increased emphasis upon interpretation of environment, and the introduction of illustrative materials with more attention to visual aids.² These also appear in many descriptions of science courses in California secondary schools.

Principal B. E. Larson of El Dorado County High School writes:

The course in Popular Science is designed for boys in the lower third of academic ability in the eleventh and twelfth years and aims to stimulate an interest in science and invention, to develop ability to evaluate reports on current science in newspapers and popular magazines, and to promote an open-minded attitude on social problems which have rela-

¹ Wilbur L. Beauchamp, *Instruction in Science*. Monograph 22, National Survey of Secondary Education, Office of Education Bulletin, 1932, No. 17. Washington: United States Department of the Interior, 1933, p. 61.

² *Ibid.*, pp. 62-63.

tion to the subject matter. The background of the first semester is electricity. The topics are nontechnical and are presented from the consumer point of view. A large amount of demonstration is used to show structure, proper use, and repair of appliances.

Sidney E. Lang, instructor at Tule Lake High School, states that

the chemistry course has been modified by the addition of projects. An experiment on alcohol from potatoes is being performed by several students. It attacks a real problem in this potato-growing community.

Miss Marie M. Helsey describes the Science Survey at Pomona Junior College and High School, for students who do not intend to go to college.

We take first a study of matter and the structure of matter, because science cannot be studied without a conception of matter. This necessitates a study of electrons and protons, which leads into the discussion of electricity. We consider electrical appliances as to how and why they work. In studying electrical appliances the question of heat, its sources and methods of distribution, is introduced, so we take up discussions of those topics. Naturally, questions as to the nature of light are asked, and we discuss light. This usually leads to some question of an astronomical nature. Along with these we consider wave phenomena which directs us to topics centered around light, radio, and sound. Usually, too, somewhere in the course, weather is introduced.

We make use, frequently, of the very fine films that are available. Trips to a neon sign plant, an ice plant, a photography shop, an electroplating shop, and sometimes to the pipe organ in a church are planned.

We are fortunate in having a government weather observer in Pomona, so we ask him to talk to us on weather prediction, and often a representative from the Edison Company discusses proper lighting for us. The gas company is very willing to send up a model refrigerating unit for demonstration. We use all the sources of a scientific nature that are available, as far as possible those which students might contact naturally.

SCIENCE FOR HOME AND FARM

At Bishop High School, according to Principal Robert H. Blee, "the noncollege group learns facts. In chemistry, foods occupy quite a little attention; in physics, mechanics and electricity come in for their share."

Applied Science at the Oroville High School, outlined by Principal James C. Nisbet, has a home problems unit, which includes splicing clothesline, repair of electric switches, adjustment of clocks, and repairing electric iron cords. The direct application of other units in the course is not always so evident, however, as they include (1) the general structure of the universe: nebulae and distribution of cosmic material in interstellar space; and (2) the solar system: the sun, its structure and size; planet sizes and orbits; the earth and its major motions; and the effect of the moon on the earth's orbit. Doubtless, the

units on atmosphere and weather, simple machines, electricity, and heat energy and motors afford opportunity for interpreting environment, but the list illustrates the difficulty experienced by the most earnest teacher in effecting transition from traditional grouping of topics to a less familiar organization.

Applied Science at Redondo High School, writes Mrs. Aileen S. Hammond, Principal, contains a unit on narcotics education: alcohol, tobacco, and marihuana. Other units are the composition of matter, water, air, and petroleum.

Principal C. L. Walton of Caruthers Union High School, presents an outline of Applied Science as developed by instructors D. C. Doane and R. H. Butzbach over a two-year period, with particular reference to the common objects, materials, and equipment found in homes and on farms:

1. The earth and sky (four weeks)
2. Important elements and compounds (three weeks)
3. Life processes, conservation, soil, heredity (four weeks)
4. Photography and light, sound and music (two weeks)
5. Foods and diet, diseases and health, medicines, cosmetics, and poisons (four weeks)
6. Digestion, circulation, mental health (four weeks)
7. Common materials: petroleum, soap, textiles, building materials (four weeks)
8. Electric circuits and household appliances (three weeks)
9. Heating and refrigeration (two weeks)
10. Machinery; automobile, driving and upkeep (three weeks)

Principal William T. Mooney, of San Juan Union High School, Fair Oaks, writes of Senior Science:

The laboratory work is very general and technique is stressed. Special projects such as making sugar from sugar beets, the effect of radium ore on plant growth, making rubber stamps, plant growth in water solutions, soap-making, and water filtration are used as fast as the student is inspired to do such work.

Chaffey Union High School at Ontario has developed courses in Life Science, Junior-Senior Science (for vocational boys), and Related Science for homemaking classes. Units of the latter, according to Principal Ernest W. Fischer, are causes of food spoilage, preservation of foods by control of microorganisms, fuels and cooking stoves, electricity in the home, home lighting, heating and ventilation, water supply, food chemistry, textiles, and small household equipment.

NEW EMPHASES IN TRADITIONAL FIELDS

The Committee on the Function of Science in General Education, of the Commission on Secondary School Curriculum, reports the trends in reorganization of science teaching to center about three types of

courses: Special Field courses in physics, chemistry, or biology; Broad Field courses, which draw material from two or more of the natural sciences; and Unified Core Studies, which organize their content in terms of student interest and concerns.¹ Courses in the special fields or separate sciences are coming to be more concerned with topics of general interest, such as cosmetics or petroleum, than with logical unity. Examples in California high schools of such courses are the General Science course offered at Hilmar, Pittsburg, and San Jacinto, and the Practical Science course at Santa Cruz, as well as many of the courses mentioned in the opening paragraph of this article.

Principal A. C. Stevens, Jr., at Hilmar, states:

In some cases we teach four years of general science. No specialization is allowed until it is felt the student is ready; some begin to specialize as early as the second semester of the ninth grade.

Principal C. W. Lockwood describes the astronomy unit at San Jacinto as

our most interesting unit in general science, perhaps because it is a familiar topic yet touched upon in no other course.

We make star maps which we use at night. We go to the river bed and have weiner bakes. Around the campfire interest is keen. By actually locating the stars and constellations in the sky, the children feel that they have gained something real. A study of mythology in connection with the stars has aroused enthusiasm. Again, I believe this is because the subject matter is almost entirely new.

Principal E. G. Garrison, of Hemet, has changed biology into a course in human hygiene and a study of healthful living.

Of his Life Science course, instructor Ernest Payne of Chaffey Union High School writes:

At Chaffey we are cognizant of the vast quantity of possible material appropriate to a course in high school biology and from that store we attempt to present to our students a body of material that will contribute most in the development of happy, participating citizens. Our fundamental idea is that high school biology should concern itself with the living rather than with the dead. The automobile and other forms of transportation have taken people back to the out-of-doors. National and state parks have made primitive areas appealing and accessible. Now the public school must prepare the citizenry for a more abundant and intelligent use of these areas, and we believe that responsibility falls most certainly upon the biology department.

ADVANCED PHYSICAL SCIENCES IN SENIOR HIGH SCHOOLS

Survey courses covering the several physical sciences are represented by the advanced offerings that increasingly are replacing physics

¹*Science in General Education*. Report of the Committee on the Function of Science in General Education, Commission on Secondary School Curriculum. New York: D. Appleton-Century Company, Incorporated, 1938, p. 454 ff.

and chemistry for juniors and seniors. This development has been facilitated by the appearance of usable textbooks in recent years. This type of course appeals to the teacher of physical science because it combines physics and chemistry material, with which he is already familiar, and gives a sense of progress without making heavy demands upon him for knowledge of adolescent psychology. Its limitations may be that it can be mere rearrangement without genuine synthesis, that it ignores the actual needs of adolescents, and that its announced purposes may be as artificial as the more traditional disciplines it supersedes. There seems to be considerable confusion in the minds of principals and teachers as to the relative emphasis to be placed upon facts, technical procedures, and interpretations. It is questionable whether generalizations can have much vital meaning unless drawn from situations and specifically applied to environment. A survey course may be as sterile of value for human living as the traditional content of a course in one of the specific sciences if it offers only information detached from the real concerns of the students. Insight is not an automatic outcome derived inevitably from any selected material; reflective thinking cannot eventuate without opportunity to practice definition, relevant selection, inference, and testing of hypotheses. Continued fumbling about with topics of scientific nature, unaccompanied by study of the learners' lives and mental development, offers small promise of effecting useful reorganizations of science courses. The abandonment of logical structure in presentation is no advance in itself; unification of science material about the needs of adolescent and the identification of problems they actually confront may lead to some science instruction useful in living today.

With this viewpoint in mind, Principal H. C. McMillin transmits a description by instructor Webster Hall of San Bernardino of a planned approach to Everyday Science:

Everyday Science is an attempt, as the name implies, to present science to boys and girls just as it is likely to impinge upon their lives as members of society.

The chief aim of the course is twofold: First, to assist the student in understanding and using "the scientific attitude" by doing away with all true-false, multiple choice, or completion testing, as we feel that context of such questions frequently suggests the proper answer, and rarely encourages genuine thinking on the part of the student.

We rely entirely upon deduction and insist that the answer to problems that arise be proved in the following steps: Opinions must be eliminated and only observable facts listed; questions for solution must be clearly stated in the pupil's own words to show that he clearly understands what he is looking for; possible deductions are then listed from the facts given; and a conclusion is drawn, based upon that deduction which satisfies all the facts.

Secondly, we aim at providing a tryout on projects in many fields involving science in the hope that the student may acquire an interest

which can be developed into a hobby. We feel this is necessary because of the gradual decrease in working hours and corresponding increase in leisure time.

For illustration, photography is used as a means of studying light. It is very simple to introduce the study of refraction, reflection, color, polarization, illumination, and optical instruments in general, while studying how to take, develop, and print pictures. Again, in the study of the earth one can easily construct a simple seismograph and introduce the qualitative study of levers, inertia, motion, and mechanics. The number of individuals making the study of earthquakes as a hobby is truly amazing.

HIGH SCHOOL SCIENCE CLASSES STUDY EARTHQUAKES AND STRATOSPHERE

Modern Science has been developed over several years at Alhambra City High School, states Principal H. M. Werre, by a committee of teachers through the leadership of Miss Jeannette A. Green, chairman. Elective for students in the eleventh or twelfth years, the course is taught daily for seventy-minute periods in sections averaging thirty pupils. Motion pictures of related materials are presented once a week, and reference reading provides the basis for class discussions and suggests group experimentation. Miss Marion Ruth Arzt, who also teaches chemistry, and Garry W. Korn, who instructs in photography and industrial chemistry, have assisted Miss Green in the development of the present program. Naturally, there is variation in the topics studied between sections and from year to year. Mr. Korn has supplied the units considered by his sections during the present school term. In the first semester, earthquakes were studied for three weeks, with consideration of the interior of the earth, types of surface disturbances, and quake-resistant building construction. Weather forecasting provided an approach to a study of the atmosphere; and, after study of the composition of air and atmospheric layers, stratosphere flights were investigated; three problems naturally appeared—falling bodies, rise of balloons, and area of the earth visible from different heights. This unit consumed a month of class time. The class then proceeded outward into space with its study and the next six weeks were devoted to the telescope, especially the two-hundred-inch reflector under construction at Palomar; to the nature of light (reflection, refraction, chromatic aberration) and uses of lenses and mirrors; and to the sun, sunspots, and eclipses. Another month was given to stars, comets, meteors, and nebulae. The consideration of these topics was enlivened by liberal use of motion pictures and conducted trips for the students to the Griffith Planetarium and Mount Wilson Observatory.

A long-unit assignment on water concluded the semester and opened the second half of the course. The first part considered prob-

lems of community use, purification, electrolysis, solutions, and ionization. Three weeks of the second semester were allowed for water conservation projects—Boulder, Parker, and Shasta Dams, the Metropolitan Aqueduct, the Norris Dam and water projects under the Tennessee Valley Authority. A postscript to the unit on water was the section on refrigeration and air conditioning; the topics on ice, commercial refrigerants, humidity, and cost and installation of air cooling systems consumed slightly more than two weeks. The subjects of glass and plastics occupied the class for the following month. The final weeks of the semester were given to the chemistry of combustion, fuels, and automobile engines; to cosmetics and quackery in medicine and beauty treatments; and to familiar chemicals in the home—salt, baking and washing soda, and soaps. If time allowed, the chemical reactions involved in the action of yeasts and bacteria in fermentations were considered. Most students will have encountered these topics in biology in the tenth year. The most surprising omission in the course, perhaps, is a unit on electricity; but consideration of electrical home appliances and superficial repairs is offered in ninth-grade general science.

Progress of the Youth Study

AARON JONES, *Technical Director of the California Youth Study
for the State Department of Education*

An article in the May issue of the *California Schools* outlined some of the causes for undertaking a study of youth in California, named the agencies responsible for the study and mentioned some of the people who are engaged in the activity. In this article an attempt will be made to indicate some of the actual methods being employed in the study, the agencies and institutions being asked for information, and something of the progress of the study to date.

Of course, the most important element in the study is the youth themselves, about sixty thousand of whom are being asked by means of information sheets mailed to them to answer some very important questions about their work experiences, their training for work, the vocational guidance they received while they were in school and while at work, and other related questions. Because of the limitations of time and funds for the study, it is being confined to the question of work and guidance, and preparation for work. Health, recreation, and social problems are not being considered except as these are directly related to the economic condition of youth. A dozen or more communities in various parts of the state are being chosen as centers for the study, and these communities have been chosen so that they will give a cross section of the state as a whole from the standpoint of geography, industry, population, races of people, and other similar factors.

GROUPS SELECTED FOR STUDY

The names of the youth selected for study are being obtained from lists of high school graduates, junior college graduates, "dropouts" from these schools, lists of those registered in offices of the California State Employment Service, and from those named as older brothers and sisters of children in grades 7 to 12, inclusive. The age range included in the study is from 16 to 25 years, but pupils in regular attendance in high schools are not being studied as it is felt that these people do not constitute a problem for the state until they are out of school and on the labor market.

In addition to these, the pupils in junior colleges, evening schools, trade schools, continuation schools, and business schools in the communities studied are answering the questions while they are in these schools.

One of the greatest problems to be solved by workers in the Survey has been to get the present addresses of the young adults. The graduates of even recent years have been so mobile that a large proportion of the letters addressed to them are returned because their present address is unknown. Very few high schools have recent addresses of their graduates, and their information concerning the whereabouts of the "dropouts" is even more meager.

Some interesting facts are coming to light in the attempts to get names and present addresses of young adults. For example, it was found that not one of the five hundred graduates of a certain junior college during the last five years was found among those registered in the local office of the State Employment Service, and but very few of the thousand and more high school graduates were registered with the State Employment Service. A recent study made by that junior college revealed that only approximately 4 per cent of its graduates were employed.

It is too early to predict what percentage of the information sheets sent to young adults will be answered and returned, but these young people seem to be responding quite well in the cities where sheets have been mailed. It is anticipated that by May 22 all information sheets will have been mailed to the youth.

Letters were sent to principals and superintendents of schools early in March to find whether they had made any kind of study of graduates and "dropouts" from their schools.

About 50 per cent of those who responded indicated that some studies had been made or were in the process of being made, but early returns from recent requests for such information as the percentage of graduates who entered schools of higher learning, percentage completing junior college, percentage graduating from four-year college or university, percentage employed, percentage unemployed and seeking work, percentage receiving vocational or educational guidance from school since leaving the school, percentage married, and other similar information indicate that not more than 7 per cent have any accurate information at all and not more than 2 per cent have any extensive information for more than one year.

Questionnaires have been sent to principals, guidance directors or counselors, placement officials in some seven hundred secondary schools and junior colleges, both public and private. A good response is being made by these officials. From the returns so far received a general interest and awakening to the needs of more adequate guidance and placement service is evident, but that so far there is much left undone that needs to be done. It is hoped that the final tabulations of these responses will give a clear picture of what is common practice and

what is best practice among the schools of California in their attempt to prepare their students for work and to assist them to find employment.

REVIEW OF OTHER STUDIES

Other studies recently made in California and elsewhere are being reviewed; and an attempt will be made to present their important findings in such a way as to bring together and coordinate the many isolated data, conclusions, and recommendations.

Approximately ten thousand graduates of universities and four-year colleges in southern California will receive questionnaires concerning their employment, higher education, income, relation of present occupation to field aimed at while in college, and attitude toward need of guidance while in college. The work of sending these questionnaires to the graduates, of tabulating the results, and making follow-up contacts with them will be done by the colleges and universities, but the results will be incorporated in the Youth Survey report.

Everywhere the school officials are cooperating wholeheartedly in the study. In San Diego and Los Angeles some employees have been assigned to give whatever time is necessary to assist with the study in their section. Lists of students have been prepared and letters of endorsement from principals, superintendents, and local advisory committees have been given to send to the youth along with the information sheets mailed to them.

The research departments of the Los Angeles City School System and the office of the Los Angeles County Superintendent of Schools will assist in directing the work of card punching, sorting, and tabulating the data; and they have made arrangements to house some of the Hollerith machines needed for the study and to make available whatever machines they already have for this purpose. Results of the questionnaire will be shown separately for each community studied, and where desired, results for separate schools will be shown.

SURVEY OF INDUSTRIAL AND BUSINESS ORGANIZATIONS

Other important phases of the study are being directed by Mrs. Claudia Williams for the Division of Planning and Research of the California State Relief Administration. Mrs. Williams and her assistants are stationed in San Francisco. They are interested in finding from business and industrial firms, from labor organizations, from clubs, associations, and noneducational institutions something about their demands upon and their services to youth, such as the types of work to be done, the kind of training required, methods of providing this training for youth, restrictions as to age and experience qualifica-

tions, and services rendered to youth by these institutions and agencies. Questionnaires will be sent to several thousand industrial organizations, and personal interviews will be held with many of the state directors and leaders in these industries and labor organization leaders. The questionnaires to these forms are now made and they are being prepared for mailing.

Other similar and related studies of industry and youth-serving organizations are being reviewed, and these will be coordinated into a unified picture where possible. Tables of data pertinent to the present study have been made from information found in the summary on employment in California contained in Volume I of the *Final Report of Total and Partial Unemployment, 1937*,¹ and in other sources; and graphs are being prepared to give greater meaning to these data.

It is expected that all phases of this study will be united into a single report; and it is hoped that its findings will be sufficiently reliable and significant to school men, statesmen, industrialists, organization leaders, and to youth themselves that direction will be given therefrom to their activities and decisions in behalf of the youth of the state.

¹*Final Report of Total and Partial Unemployment, 1937. Census of Partial Employment, Unemployment, and Occupations, 1937, Volume I.*

Report on Social-Economic Characteristics of People on Relief Significant for Education

Facts that have considerable significance for all school administrators are revealed in the report of a survey of the social-economic characteristics of people on relief in California. The report, "Who are on Relief?", has been prepared from data compiled by the Planning and Research Division of the State Relief Administration and distributed to California educators by H. Dewey Anderson, State Relief Administrator. The statements which follow are taken in full or have been condensed from the report.

Relief families contain proportionately larger numbers of children of elementary school age than are found in the general population. Of all persons dependent on SRA in California, 40 per cent are children 14 years or younger, whereas in the state's population only 24 per cent are children of these ages. To a very pronounced degree, therefore, SRA is engaged in caring for destitute children on relief today. There are more than 125,000 being reared on SRA.

One out of every 10 persons receiving SRA aid is of high school age; a total of 32,000 boys and girls—a number sufficient to populate ten large high schools.

Even more thought-provoking, perhaps, is the fact that 22,000 young men and women between the ages of 20 and 24 are unemployed, having given positive proof of absolute destitution, and are receiving state relief. Persons in their most employable years, from 25 to 34, who are not employed in private industry and are on the SRA rolls number 44,000. Here are enough idle men and women to people a large California city.

While it is true that persons over 35 years old are proportionately fewer in the SRA than are found in the total California population, this does not necessarily mean that unemployment strikes these ages less frequently than it does younger people. It is probable that proportionately more persons of such ages who have suffered prolonged unemployment find their way onto WPA projects due to previous training which fits them for such projects.

The typical person receiving SRA aid belongs to the white race and 88 per cent are native-born Americans. The report shows that 66 per cent of all relief clients are white, but it also shows that more Mexicans and Negroes receive relief than their proportions of the total population would warrant. While Mexicans comprise only 6.5 per cent of Cali-

for California's population, they total 25.2 per cent of those on relief. There are over 80,000 Mexicans receiving SRA aid of whom 58,000 are American citizens. These figures must not be taken to mean "alien-Mexicans," of whom there are about 22,000 on relief.

The effect of prolonged depression and its accompanying unemployment is especially noticeable on Negroes. Of an estimated 97,000 colored people in California, approximately 14,000 are on SRA.

While it is true that 18 per cent of all heads of cases certified and receiving relief are aliens, 2 per cent of these have their first papers. Because of the fact that among alien-headed cases many of their wives and most of their children are native-born Americans, aliens are not 18 per cent of all relief clients but only 9.6 per cent of such persons. The complications in attempting to remove aliens from relief rolls are found in this fact, that only 6.3 per cent of all dependents on heads of cases who are receiving SRA aid are aliens, while 93.7 per cent of such dependents are citizens.

Less than 10 per cent of all relief clients in California are native sons and daughters. But California is a new state in which only 34 per cent of the population were born here, compared with an average of 67 per cent in other states. Of those receiving SRA aid in California who came to the state from elsewhere in the United States or from a foreign country, 62 per cent came to California prior to the crash in 1929. The typical client is, therefore, not a person who has come to California to benefit by this state's relatively better provisions for aid to destitute unemployed. However, a very substantial proportion of all persons receiving relief, who are not native sons, 30 per cent or approximately 85,000 persons, came to California since the trough of the depression in 1933.

A relief family averages 4.22 members and received an average payment on SRA in February of \$38.88 to cover all allowances for food, rent, and utilities. A single person received \$15.97 to cover all these essentials for the month.

In comparison with the total population in California, families on relief contain on the average a larger number of persons. For example, families of eight or more members are 2.5 per cent of the general population, but they constitute 8.0 per cent of the relief population. As the relief payments in SRA are based upon budgetary needs for food, rent, and utilities, it is these large family units that account for those relatively high relief checks paid to a small proportion of all relief recipients.

The fact that SRA clients are living on minimum subsistence budgets and have been greatly demoralized in many instances by the circumstances of their lives, as well as by their enforced idleness, results

in a considerable amount of current disability due to nervous or physical illness. Our study shows that 93 per cent of the heads of cases are currently available for work and that 7 per cent are either temporarily unemployable or have not a recorded employable status. Besides those who head the cases there are 11.5 per cent of all dependent members of relief families who are reported as available and willing to work.

When an examination is made as to type of work which case heads are able to perform, it is interesting to note that only 65.4 per cent are able to do heavy work. The medical survey now in progress already indicates members of relief families suffer from many more physical disabilities than the general population. This is no surprise in view of their circumstances of life, but it does affect their employability to a very real extent. Therefore the employability of those now on relief rolls depends upon their physical and mental rehabilitation. It can not be stressed too forcibly that if these people are ever to regain a place in private industry and thus be removed from the relief rolls of the government they must be made physically sound once more.

Number and Average Annual Rates of Salary of Certificated Personnel 1936-37, 1937-38

WALTER E. MORGAN, *Assistant Superintendent of Public Instruction;
and Chief, Division of Research and Statistics*

Comparison of the data reported by county superintendents of schools relative to the certificated employees of school districts, county superintendents of schools and their deputies, and rural supervisors of elementary schools for the school years 1936-37 and 1937-38 indicates a number of conditions and trends of apparent significance. Data reported for the school year 1936-37 have been audited to a reasonably complete extent while those for the school year 1937-38 are derived from only partially audited reports. Any changes which will be made as a result of the completion of the audits probably will be minor in character and will not affect state total figures materially.

Number of Certificated Employees

Comparison of the statistics for the two school years shows that there was an increase of only 88 professional school positions in the entire state during the biennium. The total number of employees in such positions during the school year 1936-37 was 46,871 while the number of such employees in 1937-38 was 46,959. The total increase was 88. Of this total, an increase of 78 is noted in the number of certificated employees of school districts, while the remaining 10 represented the increase in the number of rural supervisors employed by county superintendents of schools.

While the total increase in professional school personnel for the entire school year was only 88, there was an actual increase of 1,505 in the number of full-time employees between 1936-37 and 1937-38. This increase was offset by a decrease of 1,417 in the number of partial-time employees. The total number of full-time employees increased from 41,628 in 1936-37 to 43,133 in 1937-38. The number of partial-time employees decreased from 5,243 to 3,826 during the same period.

The greatest increase in the number of full-time personnel was found in the secondary school districts. The number of such employees in high school districts increased from 17,032 to 18,041 or a total increase of 1,009 between 1936-37 and 1937-38; while the number of such employees in junior college districts increased from 838 to 1,008 or a total increase of 170. A considerable part of the increase in the junior college districts, however, was brought about as a result of the

transfer of the eleventh and twelfth grades of the senior high schools at Compton and Pasadena to the four-year junior colleges administered as district junior colleges. One hundred sixteen of the total increase of 170 in junior college districts was reported for these two junior college districts. The total increase in the number of full-time employees of the high school and junior college districts was 1,179.

In elementary school districts the total increase in the number of full-time employees was only 375, the number of such employees, increasing from 23,432 to 23,807.

Over two-thirds of the entire increase in the number of full-time employees resulted from the increase in the number of full-time teachers employed in secondary schools below the junior college level. The total number of full-time teachers employed in such schools was 15,614 in 1936-37 and 16,713 in 1937-38, an increase of 1,099.

Salaries of Certificated Employees

Average annual rates of salary showed an upward trend in practically all types of positions during the biennium although the rates of salary paid on the several levels and for the several types of positions showed little relative change. Thus while the average annual rate of salary paid county superintendents of schools increased from \$2,662 to \$2,683, similar changes were also noted for all other types of superintendencies, so that the average rate of salary for county superintendents is still only approximately two-thirds of the rate of salary of city superintendents in charge of elementary school districts and less than half the rate of salary paid city superintendents in charge of elementary and secondary schools. Similarly, the salaries paid principals and teachers in the elementary schools continue to be materially lower than the salaries paid in comparable positions in secondary schools.

In the reports of kindergarten personnel it is noted that there is a continuance of the trend toward the employment of kindergarten teachers for double-session service. The number of kindergarten teachers employed for single session only decreased from 465 to 434 while the number of those employed for double session increased from 658 to 696.

Change in Method of Reporting

It is probable that a considerable part of the reduction in the number of partial-time certificated employees and possibly some portion of the increase in the number of full-time employees was occasioned by changes in the method of reporting positions in annual reports to the California State Department of Education. In the reports for 1936-37 each individual position was reported even though one person

may have been employed in two or more separate positions. In 1937-38 duplications between positions were eliminated insofar as possible. Thus in 1937-38 individuals employed full-time in a day school and also on a partial-time basis in an evening school would have been reported as a full-time position only, whereas in 1936-37 two positions would have been reported for such an employee. In consequence of this change it is probable that the major portion of the decrease of 1,417 in the number of partial-time employees is an artificial rather than an actual reduction.

In the following tabulation an attempt has been made to segregate the various types of county and school district positions, employment in which is limited to persons holding teachers credentials or certificates. For purposes of comparison and completeness county superintendents of schools and deputy and assistant county superintendents of schools are also included in the tabulation although persons employed in these positions are not required to hold teachers credentials or certificates. For each type of position listed, there are given for each of the school years 1936-37 and 1937-38 the number of such positions occupied during the school year, and the average annual rate of salary paid those employed in each such position.

Number and Average Rates of Salary of Certificated Personnel of the Public Schools, 1936-1937 and 1937-1938

Type of position	1936-37		1937-38*	
	No.	Average annual salary	No.	Average annual salary
I. Superintendents of schools:				
A. County superintendents of schools ¹	57	\$2,662	57	\$2,683
B. City superintendents of schools:				
1. In charge of elementary and secondary schools ²	42	6,100	42	6,237
2. In charge of elementary schools only.....	15	4,121	17	3,919
C. District superintendents of schools:				
1. In charge of elementary and secondary schools.....	35	4,093	36	4,304
2. In charge of secondary schools only.....	57	4,364	59	4,477
3. In charge of elementary schools only.....	155	3,153	167	3,195
D. Total number of superintendents of schools.....	361		378	
II. Deputy and assistant superintendents:				
A. Deputy and assistant county superintendents ¹	84	1,774	84	1,885
B. Deputy and assistant city superintendents:				
1. In charge of elementary and secondary schools.....	31	5,362	29	5,604
2. In charge of elementary schools only.....	4	3,700	6	4,000
3. In charge of secondary schools only.....	2	6,602	3	6,681
C. Deputy and assistant district superintendents:				
1. In charge of elementary and secondary schools.....	1	3,300	1	3,600
2. In charge of elementary schools only.....	1	2,400		
3. In charge of secondary schools only.....	3	3,363	1	3,750
D. Total number of deputy and assistant superintendents of schools.....	126		124	
III. Directors and other central administrative staff officers:				
A. In city school districts.....	109	3,079	103	3,400
B. In other school districts.....	1	2,322	1	3,250
C. Total number of directors and other central administrative staff officers.....	110		104	
IV. Supervisors of instruction (full time):				
A. Rural supervisors employed by county superintendents of schools.....	185	2,833	195	2,799
B. In city school districts.....	198	3,049	201	3,187
C. In other school districts.....	8	1,697	6	1,825
D. Total number of full-time supervisors of instruction.....	391		402	
V. Supervising (nonteaching) principals in day schools:				
A. Separate junior colleges: ³				
1. District junior college.....	7	4,982	8	5,620
2. Junior college in high school district.....	2	5,500	3	5,100
3. Totals, separate junior college.....	9	5,092	11	5,478
B. High school and junior college:				
1. District junior college.....	1	5,100	2	5,305
2. Nondistrict junior college.....	10	4,061	9	3,979
3. Totals, high school and junior college.....	11	4,156	11	4,220

¹ Not required to hold professional credentials or certificates.

² Includes superintendents of schools of the city and county of San Francisco.

³ Not including junior colleges housed in state colleges, since such junior colleges are administered by the presidents of the state colleges at Fresno, San Diego and San Jose.

* Data for 1937-38 based on incompletely audited reports of county superintendents of schools.

Number and Average Rates of Salary of Certificated Personnel of the Public Schools, 1936-1937 and 1937-1938—Continued

Type of position	1936-37		1937-38	
	No.	Average annual salary	No.	Average annual salary
V. Supervising (nonteaching) principals in day schools—Continued:				
C. Junior-senior high school.....	33	\$4,173	36	\$4,441
D. Senior high school.....	36	4,509	43	4,697
E. Four-year high school.....	92	4,007	91	4,120
F. Junior high school.....	106	3,838	116	4,014
G. Elementary school.....	665	3,037	687	3,141
H. Total number of supervising principals of day schools.....	952		995	
VI. Teaching principals in day schools (teaching one or more classes):				
A. Separate junior college:				
1. District junior college.....	4	5,325	3	4,669
2. Junior college in high school district.....				
3. Totals, separate junior colleges.....	4	5,325	3	4,669
B. High school and junior college:				
1. District junior college.....	1	4,800	1	3,600
2. Nondistrict junior college.....	3	3,650	3	4,233
3. Totals, high school and junior college.....	4	3,938	4	4,075
C. Junior-senior high school.....	11	2,960	10	3,043
D. Senior high school.....	2	3,600	2	3,530
E. Four-year high school.....	132	2,868	132	2,959
F. Junior high school.....	16	2,554	11	2,571
G. Elementary school.....	1,607	1,779	1,558	1,829
H. Total number of teaching principals of day schools.....	1,776		1,720	
VII. Vice-principals and deans:				
A. Separate junior college:				
1. District junior college.....	24	3,403	24	3,499
2. Junior college in high school district.....	3	4,367	5	3,280
3. Totals, separate junior college.....	27	3,510	29	3,461
B. High school and junior college:				
1. District junior college.....	14	3,265	15	3,421
2. Nondistrict junior college.....	42	2,821	45	2,914
3. Totals, high school and junior college.....	56	2,932	60	3,041
C. Junior-senior high school.....	67	3,090	75	3,183
D. Senior high school.....	80	3,269	88	3,401
E. Four-year school.....	273	2,627	258	2,745
F. Junior high school.....	144	2,904	152	3,070
G. Elementary school.....	189	2,104	215	2,091
H. Total number of vice-principals and deans.....	836		877	
VIII. Heads of departments:				
A. Separate junior college:				
1. District junior college.....	30	2,929	29	3,081
2. Junior college in high school districts.....				
3. Totals, separate junior college.....	30	2,929	29	3,081
B. High school and junior college:				
1. District junior college.....	38	2,777	36	2,902
2. Nondistrict junior college.....	74	2,600	73	2,685
3. Totals, high school and junior college.....	112	2,660	109	2,757
C. Junior-senior high school.....	90	2,829	98	2,867
D. Senior high school.....	198	2,785	236	2,881
E. Four-year high school.....	440	2,579	430	2,679
F. Graded evening high schools.....	2	2,423		
G. Evening high school and junior college.....			1	2,400
H. Junior high school.....	34	2,327	1	2,400
I. Elementary school.....				
J. Total number of heads of departments.....	906		904	

Number and Average Rates of Salary of Certificated Personnel of the Public Schools, 1936-1937 and 1937-1938—Continued

Type of position	1936-37		1937-38	
	No.	Average annual salary	No.	Average annual salary
IX. Other certificated employees including full-time teachers: ⁴				
A. Separate junior college:				
1. District junior college.....	591	\$2,677	624	\$2,737
2. Junior college in high school district.....	66	2,787	117	2,731
3. Totals, separate junior college.....	657	2,688	741	2,736
B. High school and junior college:				
1. District junior college.....	306	2,329	339	2,436
2. Nondistrict junior college.....	833	2,130	825	2,232
3. Totals, high school and junior college.....	1,139	2,184	1,164	2,291
C. In junior-senior high school.....	1,601	2,300	1,719	2,382
D. In senior high school.....	2,296	2,434	2,636	2,522
E. In four-year high school.....	5,398	2,199	5,579	2,237
F. In graded evening high school.....	6	1,960	10	2,221
G. In junior high school.....	4,474	2,285	4,761	2,364
H. In high school district, not assigned to a specified type of secondary school.....	43	2,319	103	2,497
I. Totals in separate high schools.....	15,614	2,288	16,713	2,360
J. In elementary schools.....	19,408	1,743	19,764	1,793
K. In kindergartens:				
1. Teachers:				
a. Double session.....	658	1,921	696	1,975
b. Single session.....	465	1,399	434	1,524
2. Assistants:				
a. Double session.....	16	1,318	13	1,693
b. Single session.....	9	1,162	9	1,045
L. Total number of other certificated employees including full-time teachers ⁴	36,170		37,629	
Total number of full-time certificated employees.....	41,628		43,133	
XI. Partial-time certificated employees:				
A. Deputy and assistant county superintendents of schools.....	2		10	
B. Directors and other central administrative staff officers:				
1. In city school districts.....	6		6	
2. In other school districts.....	1			
C. Supervisors of instruction:				
1. Rural supervisors employed by county superintendents of schools.....	30		23	
2. In city school districts.....	11		8	
3. In other districts.....	2		3	
4. Total number of partial-time supervisors.....	43		34	
D. Supervising principals in evening schools:				
1. High school and junior college.....	1	1,650	2	1,343
2. High school:				
a. Graded.....	64	1,839	47	2,485
b. Ungraded.....	5	994	2	1,575
c. Totals.....	69	1,778	49	2,448
3. Total number of supervising principals of evening schools.....	70		51	
E. Teaching principals in evening schools:				
1. Graded evening high schools.....	15	1,786	8	1,698
2. Ungraded evening high schools.....	2	800		
3. Total evening high schools.....	17	1,670	8	1,698
F. Vice-principals and deans in graded evening high schools.....	3	936		

⁴ Also includes counselors, teacher-counselors, school librarians and teacher-librarians.

Number and Average Rates of Salary of Certificated Personnel of the Public Schools, 1936-1937 and 1937-1938—Concluded

Type of position	1936-37		1937-38	
	No.	Average annual salary	No.	Average annual salary
XI. Partial-time certificated employees—Continued:				
G. Teachers and other certificated employees: ⁴				
1. Elementary school districts.....	701		533	
2. High school districts.....	4,281		3,086	
3. Junior college districts.....	119		98	
4. Total.....	5,101		3,717	
H. Total number of partial-time certificated employees.....	5,243		3,826	
XII. Total number of professional employees.....	46,871		46,959	
	Total			
XIII. Total number of full-time certificated employees of school districts, by level of schools in which employed:				
A. Kindergartens and elementary schools.....	23,432		23,807	
B. Secondary schools, excluding district junior colleges.....	17,032		18,041	
C. District junior colleges.....	838		1,008	
D. Total.....	41,302		42,856	
XIV. Total number of full-time and partial-time certificated employees of school districts, by types of schools:				
A. Kindergartens and elementary schools.....	24,143		24,348	
B. Secondary schools, excluding district junior colleges.....	21,413		21,136	
C. District junior colleges.....	957		1,106	
D. Total.....	46,513		46,590	

⁴ Also includes counselors, teacher-counselors, school librarians and teacher-librarians.

DEPARTMENTAL COMMUNICATIONS

Office of Administrative Adviser

ALFRED E. LENTZ, Administrative Adviser

EMERGENCY LIGHTING SYSTEMS IN PUBLIC SCHOOLS

During the last few weeks the principals of a number of public schools have received a circular letter from a San Francisco firm stating in effect that emergency lighting systems are required in school auditoriums by Articles 5201 and 5202 and that the failure to install such a system imposes certain liabilities upon the school district and the authorities of such district.

You are advised that a thorough search of the law indicates there is no provision of law requiring the installation of emergency lighting systems in any public school or auditorium, and the letter referred to above is inaccurate.

Assembly Bill 2642, now pending in the Legislature, would require the installation of such a system in public schools under certain conditions, but no effort appears to have been made to press the bill.

It may be the building ordinances of certain cities or counties require the installation of such an emergency lighting system in the public schools therein, but there is no state law which makes such a prescription.

The circular letter of the firm which is referred to above should, therefore, be disregarded in so far as it purports to state the existence of any law or the effect thereof. The California State Department of Education has communicated with the firm involved concerning the matter.

SCHOOL BUS REGULATIONS

Subdivision 1 of the statement entitled "School Bus Regulations" issued by the California State Department of Education under date of April 26, 1939, as published on pages 108-109 of the May issue of *California Schools* is hereby corrected to read as follows:

1. On all new school buses the purchase of which is contracted for after May 15, 1939, the entrance and exit door will be deemed to be directly within the view of the school bus driver, as required by subdivision 6 of Section XI of the State Board of Education Regulations

Governing Pupil Transportation, only if the most forward part of the entrance and exit door opening is not located to the rear of a line drawn crossways of the bus immediately back of the driver's seat.

SCHOOL CROSSING SIGNS

News items have recently appeared stating that with the cooperation of the National Youth Administration, school crossing signs of the "Safety Sally" type were being furnished to school districts in certain parts of the state.

The State Board of Education at its January, 1939, meeting adopted a regulation prohibiting the purchase or acceptance thereafter by school districts of school crossing signs which did not meet the specifications of the school crossing sign developed by the Division of Highways of the State Department of Public Works. Signs of the "Safety Sally" type definitely do not meet such specifications.

The regulation of the State Board of Education was adopted to provide for a uniform sign throughout the state and to eliminate school crossing signs of a type which constitute an unnecessary hazard to motorists and to pupils. The regulation of the State Board of Education does not affect school crossing signs in use prior to the adoption of the regulation.

Information concerning the type of signs approved by the State Board of Education may be secured from the Highway Maintenance Engineer, Division of Highways, Department of Public Works, Sacramento.

INTERPRETATIONS OF SCHOOL LAW

ALFRED E. LENTZ, Administrative Adviser

Attorney General's Opinions

Approval of Cost Items of Printing State Elementary Textbooks

By virtue of the enactment of Political Code section 681 in 1927, the Department of Finance succeeded to the powers and duties conferred upon the State Board of Control by School Code section 6.282 which provides that items of the cost of printing elementary textbooks by the Superintendent of State Printing must be approved by the California State Board of Control and the California State Board of Education before the payment thereof. (A.G.O. NS1662, May 4, 1939)

Classification of Teachers as Permanent Employees in Unified School Districts

Where an elementary district and a high school district were merged into a unified school district on July 1, 1936 (under Part VI of Division II of the School Code) and the average daily attendance of the district during the school year 1935-1936 (sic) was, and since has been, in excess of 850, teachers who had been employed for three consecutive school years either entirely in the unified district or partly in the former districts were entitled to permanent tenure upon their election for service in May, 1938, by reason of School Code sections 2.2100, 2.2101, and School Code section 5.500. (A.G.O. NS1668, May 10, 1939)

Effect of Senate Bill Number 821

Senate Bill 821 in the form in which it was originally introduced in the 1939 Legislature prohibits the issuance of free textbooks to students in junior colleges, since the governing board of a school district has only such powers as are specifically conferred upon it (citing *Macmillan Company v. Clarke*, 184 Cal. 491; *Grigsby v. King*, 202 Cal. 299). (A.G.O. NS1664, May 5, 1939)

Issuance of District Bonds for Teacherages

A teacherage constructed by a school district under the provisions of School Code sections 6.70 and 6.71 is not a school building within the meaning of that term as used in School Code section 4.960 and bonds can not, therefore, be issued by a school district for the purchase or erection of a teacherage. (A.G.O. NS1657, May 1, 1939)

Liability for Bonded Indebtedness of Districts Forming Union Elementary School District

Where two elementary school districts are united under the provisions of School Code sections 2.230-2.236, one district does not become liable for a proportionate share of the bonded indebtedness, School Code section 2.71 not being applicable to a district unionization under a procedure where a majority of voters by voluntary action accomplish the formation of the union district (citing Section 18, Article XI, Constitution; *People v. Hanford High School District*, 148 Cal. 705; *People v. San Bernardino High School District*, 62 Cal. App. 67; Attorney General's opinions Nos. 10827 and 10305). (A.G.O. NS1644, April 25, 1939)

Right of Board to Prohibit Private Teaching by Teachers

Under School Code section 2.984 the governing board of a school district may prescribe and enforce rules not inconsistent with law or with those prescribed by the California State Board of Education for the government of the schools under their jurisdiction. A rule adopted by the governing board of a school district prohibiting a teacher employed by the board from engaging in private teaching after or during school hours is not in conflict with any law or any rule of the State Board of Education, but the reasonableness, and therefore the validity, of such a rule is doubtful in the absence of some indication of a connection between the rule and the government of the schools. (A.G.O. NS1628, April 17, 1939)

CORRECTION

On page 114 of the May, 1939, issue of *California Schools* A.G.O. NS1358 should read A.G.O. NS1538.

FOR YOUR INFORMATION

CONFERENCE ON EDUCATIONAL FRONTIERS, JULY 7-9

Parent Education, which is also called Education for Home and Family Life, will be considered at a section meeting of the conference on Educational Frontiers to be held July 7 to 9 at Stanford University. This phase of education for parents is confused by some school workers with the organization known as the parent-teachers association. This confusion has delayed the study by school workers of its significant relationship to curriculum enrichment and to school practices. There will be no set speech on the subject, but a real conference at which every one who is interested will have opportunity to express his thought concerning curriculum, methods which have proved to be useful, the use of radio, motion pictures, and exhibits, for parents as well as children, and most important—a definition of the purposes of this phase of education.

School workers in California who may not expect to be present at the Stanford Conference are invited to send statements of their questions, desires, or plans with reference to the development of this phase of education in California to the Chief of the Bureau of Parent Education, 515 Van Ness Avenue, San Francisco.

CALIFORNIA PRIZE WINNERS IN 1939 SCHOLASTIC AWARDS

Names of California students who won prizes for high school work in arts, crafts, music and literature, in the *Scholastic* Awards, have just been announced. Awards is a national project sponsored by *Scholastic*, and students who enter compete in every classification with thousands of students from all parts of the country.

Winners from California high schools are announced in the various divisions as follows:

Art Division: Bob Rives, Alhambra City High School, honorable mention; Rudy Kauble and Margaret Marey, honorable mention, Fullerton Union High School; Maureen Love, Sweetwater High School, National City, first prize; Donald Coughlin, second prize, and Emery Slack, honorable mention, San Bernardino City High School; Sylvester A. Williams, San Diego High School, honorable mention; Yukio Tashiro, Santa Maria Union High School, scholarship at the California School of Design, Oakland, and honorable mention in sculpture.

Literary Division: Doris Gene Goodale, honorable mention, and Amy Louise MacDonald, third prize, Kern County Union High School, Bakersfield; Donald Azevudo, Modesto High School, honorable mention; Lillian Levintoff and Ellen O'Toole, second prize, and Orthello Wallis, third prize, San Diego Senior High School; Victor Groat, George Washington High School, San Francisco, fourth prize; Lee Van Atta, Santa Barbara Senior High School, first prize.

Music Division: June Sullivan, Glendale High School, honorable mention; Florence McKinney, Grossmont Union High School, honorable mention; Bourke Colvig, second prize, James Deese, honorable mention, Robert Pritchard, first prize, John Marshall High School, Los Angeles; Mildred Lifschin, second prize, Roosevelt High School, Los Angeles.

SCHOOL OF NATURAL SCIENCE

The School of Natural Science, held annually each summer in Santa Barbara under the auspices of Santa Barbara State College, the Museum of Natural History, and the Santa Barbara Botanic Garden, is announced this year for the period from August 7 to 18.

Courses at the School are correlated around the theme of Conservation of Natural Resources. Investigations will center about the Natural History Museum, the Botanic Garden, Los Padres National Forest, Laguna Blanca Bird Refuge, and the tidepools along the ocean shore.

Registration blanks and other information concerning the sessions at the school may be secured from Harrington Wells, Director, School of Natural Science, Santa Barbara State College.

MEETING FOR TEACHERS OF BUSINESS SUBJECTS

Dr. B. Frank Kyker, Chief of the Business Education Service, United States Office of Education, will meet with teachers of business subjects on July 5, at 4:00 p. m., Haviland Hall, University of California. He will discuss the subject "The Commercial Teacher Looks at the George-Deen Act."

Dr. Kyker is coming to California for the meeting of the National Education Association Convention in San Francisco during July.

CHILDREN WARNED AGAINST DANGER FROM EXPLOSIVES

The cooperation of public school teachers of California in warning children against playing with blasting caps is requested by the Institute of Makers of Explosives. This warning is issued annually at the beginning of summer vacation through the schools and newspapers and over the radio. As a result, the number of such accidents which

occur more frequently in vacation when children are freer to explore the out-of-doors has been greatly reduced.

AWARDS FOR EDUCATIONAL RESEARCH

Awards for outstanding pieces of research in the various fields of education have just been announced by The Committee on Awards of the American Educational Research Association.

Nominations for the awards were submitted by members of the committee who prepared the five numbers of the Review of Educational Research for 1937. Supplementary nominations were solicited from a number of other persons.

The following studies were judged outstanding:

Wrightstone, J. Wayne. *Appraisal of Newer Practices in Selected Public Schools*. New York: Teachers College, Columbia University, 1935. Pp. 117.

Wrightstone, J. Wayne. *Appraisal of Experimental High School Practices*. New York: Teachers College, Columbia University, 1936. Pp. 194.

Edwards, Newton. *The Courts and the Public Schools*. Chicago: University of Chicago Press, 1933. Pp. 591.

Hardy, Martha C., and Hoefler, Carolyn H. *Healthy Growth*. Chicago: University of Chicago Press, 1936. Pp. 360.

STUDY UNITS MEET DEMANDS OF NEW CURRICULUM

The rights of American citizens under the Constitution and instances of the denial of those rights to groups and individuals in the United States are discussed fully in the current study unit of *Building America*, a photographic magazine of modern problems. The unit on Civil Liberties is Vol. IV, No. 8.

Building America has rapidly established itself as one of the publications suitable to the newer demands of the curriculum. Those familiar with the publication agree that it touches a wide range of topics, and that it gives historical as well as current materials on those topics. Depending upon illustrations, with short, succinct captions and descriptions, it can be used by pupils of widely varying degrees of maturity.

Ten or twelve of the larger school systems of California supply *Building America* to a large number of their secondary schools. Several elementary school and junior high school districts likewise find the publication useful. In some 75 district high schools the publication is supplied to the classes, usually by direct subscription. Over 200 bound volumes are found in the schools of the state, and more than 1400 single copies find their way into the schools each month.

Building America is a cooperative, nonprofit project, under the sponsorship of the Society for Curriculum Study. Paul R. Hanna, Professor of Education at Stanford University, is chairman of the editorial board.

One study unit is published each month from October to May. The following titles are now available as single paper-covered units, or in bound volumes with Index:

Volume I: Housing, Food, Men and Machines, Transportation, Health, Communication, Power, Recreation, Youth Faces the World;

Volume II: Our Constitution, Safety, Clothing, Social Security, Steel, We Consumers, Conservation, Movies;

Volume III: News, Our Farmers, Labor, Education, Our Federal Government, Chemistry at Work, War or Peace?, Seeing America;

Volume IV (Incomplete): Aviation, Crime, Fuel, Women, Taxes, Lumber, Business, Civil Liberties.

RESEARCH STUDIES UNDERTAKEN BY THE FEDERAL RADIO EDUCATION COMMITTEE

Several important research studies in radio education have been undertaken by Dr. Leonard Power, Assistant in-Charge-of-Research for the Federal Radio Education Committee. These studies are a survey of successful cooperative efforts on the part of broadcasters and educators, another on teacher training, and a third on the development of an experiment and idea exchange. In addition, Dr. Power is expected to serve as coordinator of all research studies which are being undertaken by the Federal Radio Education Committee, of which Dr. John W. Studebaker, United States Commissioner of Education, is the chairman.

Preliminary plans are being made for the publication of the research studies. It is expected that the first publication will be ready in November, 1939.

CALENDAR OF EDUCATIONAL MEETINGS

During 1939 a calendar of educational meetings and conferences will be published from time to time in *California Schools*. In some cases, events may be mentioned before the place of meetings has been decided, but complete information will be given in subsequent issues. The following schedule of events is chiefly a list of meetings and con-

ferences which take place during the spring term of the 1939 school year, but a few which convene in the early fall have also been included.

<i>Date</i>	<i>Organization</i>	<i>Place</i>
June 18-24	American Library Association	San Francisco
June 26-July 1	American Association for the Advancement of Science, Pacific Division	Stanford University
July 2, 6	National Education Association, Seventy-seventh Annual Convention	San Francisco
July 8-21	National Education Association, Department of Elementary School Principals, Annual Conference	Berkeley U. C.
July 10-21	Annual School Executives' Conference	Berkeley U. C.

EDUCATIONAL BROADCASTS

Broadcasts Sponsored by the California State Department of Education

Monday: 9:30 p.m.—Golden Days KRE
 Wednesday: 10 p.m.—Pageant of Youth KLX
 Wednesday: 1:30 p.m.—Parent Education KFRC
 Friday: 8 p.m.—Adventures in Science KLX
 Saturday: 3:30 p.m.—Education Today KPO

Alameda School of the Air

Monday: 1:30 p.m.—Great Moments from Literature KLX
 Tuesday: 1:30 p.m.—United States History Program KLX
 Wednesday: 1:30 p.m.—California History Program KLX
 Thursday: 11:15 a.m.—Sonny's Magic Merry-Go-Round KLX
 1:30 p.m.—Classic Myths, KLX
 Friday: 1:30 p.m.—The Workshop KLX

Broadcasts Sponsored by the United States Office of Education

Wednesday: 6:30 p.m.—Wings for the Martins NBC Blue¹
 Sunday: 1:30 p.m.—The World Is Yours NBC Red¹

Subject of Parent Education Broadcast

The broadcast by the Bureau of Parent Education at 1:30 on Thursdays over KFRC and the Mutual Broadcasting Network will be devoted to problems of adolescent development, during June, July and August. These broadcasts are as important to parents of babies as they are to parents of adolescent sons and daughters. Exact topics for each date will depend upon questions which come from listeners. The general subject will be Problems of Adolescent Growth and Development.

New Radio Education Series Announced

A new radio education series entitled, "Democracy in Action," is now being broadcast every Sunday at 11 A.M. (PST) over the Columbia

¹ NBC Red Network—KPO, KFI, KWG; NBC Blue Network—KGO, KECA, KSFD.
 CBS—KSFO, KNX; MBS—KFRC, KHJ.

Broadcasting System on a coast to coast network. This new radio series is produced by the Office of Education and succeeds the program "Americans All—Immigrants All" recently named by the Women's National Radio Committee, as the "most original and informative program" of the year.

The titles and dates of the weekly programs in the new series for the period June 4 to August 13, have been tentatively announced as follows:

- June 4—Homes for the People (Shelter)
- June 11—Strength from the Land (Conservation)
- June 18—Better Business (Trade)
- June 25—Wheels of Industry (Industry)
- July 2—Money Matters (Finance and Credit)
- July 9—Promoting General Welfare (Social Welfare)
- July 16—Human Conservation (Education and Recreation)
- July 23—Domestic Tranquility (Internal Protection)
- July 30—America Abroad (Foreign Relations)
- August 6—To Promote and Defend (National Defense)

U. C. Visual Instruction Department to Release *March of Time*

Releases of the *March of Time*, which are now available for schools, may be obtained from the libraries of the Department of Visual Instruction, Extension Division, 301 California Hall, University of California, Berkeley, and 815 South Hill Street, Los Angeles.

PROFESSIONAL LITERATURE

EDUCATIONAL POLICIES COMMISSION. *Social Services and the Schools*. Washington: Educational Policies Commission, National Education Association and American Association of School Administrators, 1939. Pp. xii + 148.

Current educational literature is full of comment on the importance of cooperation between the school and other social service agencies and of examples of such cooperative enterprises which have been jointly conducted. Among these writers there seems to be no general agreement, however, on the extent of the school's responsibility for services related to education nor on the ways and means or form of organization most effective for cooperative administration of social services. The Educational Policies Commission believes that the school must assume a leading part in society's efforts to solve its problems of social welfare through channels of public agencies, and, suiting its action to its conviction, has issued as its fourth major pronouncement of educational policy this booklet on *Social Services and the Schools*.

The volume is both an analysis of, and a recommendation of policy for, cooperative relationship between public education and public health, public recreation, public libraries, and public welfare agencies. Opening the treatise is a clear-cut "Declaration of Policy" which defines the scope of the school's responsibility for cooperating with other social service agencies and presents recommendations for administrative organization to carry on the services. A resumé of the nature and development of social services reveals how the alleviation of human suffering, formerly the sphere of various philanthropic and sectarian organizations, is coming to be accepted as a general social responsibility and that many phases are being taken over by public agencies. This tendency is pointed out as what future historians may label as one of the outstanding characteristics of the present age. In appraising the present status of the social services, the Commission mentions the lack of definite controlling policy, failure to maintain desirable standards, poor integration of services, and such obstacles to progress as extreme individualism and opportunism.

With respect to education itself, the Commission insists that full powers and full responsibility for all public educational activities should be vested in public educational authorities. As an example of confusion caused by multiple-headed control is cited the administration of educational programs sponsored as relief projects where a larger share of the control rests with federal and state relief authorities rather than in the regular channels of educational administration.

The library is shown to be primarily educational in nature and purpose, but library service throughout the country is revealed as extremely uneven and marked by great diversity of administrative practice in control and support and by overlapping of school public library services. Instances are given of the administration of public libraries by boards of education, of school libraries by other library authorities or through cooperative arrangements. The Commission recommends, in the interests of better and more extensive library service to the entire community, and as a practical transition stage, that school and public library authorities enter into contractual agreements for the cooperative administration of all community library service, and the ultimate unification of all public library service under the administration of public educational authority.

A like recommendation is made for a unified administration of all public recreation services by public educational authority. Recognition of the social

obligation to provide recreational services and the development of the services themselves are comparatively recent. Nevertheless, rapid progress is being made and many community recreation programs are being successfully conducted cooperatively by school and municipal authorities. In the transition to unified administration, the Commission recommends first that the support and administration forms of municipal recreation services such as those of parks and playgrounds be consolidated, and next that public school and municipal authorities provide for cooperative management of community recreation through recreation commissions representing both the school district and the municipality.

The development of health service, both by the school and public health agencies is briefly traced from its initial stage as merely protection against the spread of communicable disease to the modern conception of promotion of public health as an essential phase of the general welfare. Emphasis is placed on health as a major objective of education and the point of view expressed that every phase of the school health program be so conducted as to promote educational values. The Commission firmly maintains that health instruction, daily health inspection, and periodic medical inventories are essentials of an adequate school health program. Medical diagnosis and treatment, however, except for emergency cases, are left as responsibilities of the home, or in the case of indigents, to public welfare agencies. This exclusion of medical diagnosis and treatment from the health program of the school seems justifiable. However, the absolute denial that these services have a place in a public health program except on a charity basis is inconsistent with the previously accepted concept of public health as of general public concern and seems to indicate a narrow view of society's obligation for the physical well-being of all its members.

A chapter on the welfare program of the school stresses the importance of child guidance clinics, promotion of school attendance, vocational and personal guidance and placement services, regulation of child labor as it affects the school, and the care of delinquents. The Commission recognizes the gravity of the problem of providing the material needs of indigent children, for the child who comes to school hungry and cold is in no condition to receive the benefits of the school. Meeting these needs, however, is not considered as a function of the school. Except as a temporary and emergency measure it is merely a palliative and utterly fails to strike at the root of the problem.

The Educational Policies Commission, as spokesman for the educational leadership of America, deserves strong commendation for taking the initiative in proposing policy to govern the relationship of public education to other public social service agencies. *Social Services and the Schools* should prove a powerful influence in bringing about general acceptance of sound public policy for the social services. All members of the educational profession should give careful study to this booklet to help them in meeting effectively their obligations for cooperating with other social agencies.

IVAN R. WATERMAN

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